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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/734,278	12/10/2000	Jesse Jaejin Kim		3721

7590 07/16/2002

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EXAMINER

ANYASO, UCHENDU O

ART UNIT

PAPER NUMBER

2675

DATE MAILED: 07/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/734,278	KIM, JESSE JAEJIN	
	Examiner	Art Unit	
	Uchendu O Anyaso	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10 December 2000.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-20 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) Interview Summary (PTO-413) Paper No(s) _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

1. Claims 1-20 are pending in this action.

Claim Rejections - 35 USC '102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102, that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 3-8, 13, 14, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by B. Schneider et al. (Printed Publication: "An Adaptive Framework for 3D Graphics in Networked and Mobile Environments", Proc. Workshop on Interactive Applications of Mobile Computing, IMC '98, Nov. 1998).

Regarding independent claims 1, 8 and 13, and for claims 3-7, 14, 19, 20, Schneider teaches an adaptive framework for 3D graphics in networked and mobile environments wherein a network graphics framework (NGF) integrates various transmission methods for downloading 3D models in a client-server environment (see Abstract).

Furthermore, Schneider teaches a software architecture wherein a server is implemented within the NGF framework and is responsible for evaluating the parameters of each method in response to a client request, and for converting between raw data and the formats required by different transmission methods (page 4, column 2, lines 7-13).

Furthermore, Schneider teaches the results of implementing NGF with several models wherein a model (figure 2) was downloaded from a server to clients with different rendering capabilities (page 5, column 2, lines 10-13). Herein, a handheld in the form of a Thinkpad mobile computer is adapted to communicate with the server, and the Thinkpad is capable of visualizing the 3D model (page 5, column 2, lines 10-34; page 6, paragraph 2).

Claim Rejections - 35 USC '103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2, 9-12, 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over *B. Schneider et al.* (Printed Publication: "An Adaptive Framework for 3D Graphics in Networked and Mobile Environments", Proc. Workshop on Interactive Applications of Mobile Computing, IMC '98, Nov. 1998) in view of Deering (U.S. Patent 5,793,371).

Regarding claims 2 and 9-12, in further discussion of claims 1 and 8, Schneider does not teach a server performing file compression. On the other hand, Deering teaches a method and apparatus for geometric compression of 3D graphics data wherein server 20 includes a 3D graphic compression unit 60 (column 5, lines 35-43, figure 1 at 20, 60).

Thus, it would have been obvious to a person skilled in the art to combine Schneider and Deering's teaching because while Schneider teaches an adaptive framework for 3D graphics in networked and mobile environments wherein a network graphics framework (NGF) integrates various transmission methods for downloading 3D models in a client-server environment (see Abstract), Deering teaches a server 20 that includes a 3D graphic compression unit 60 (column 5, lines 35-43, figure 1 at 20, 60). The motivation for combining these teachings would have been to increase the amount of geometry that can be cached or stored in the fast main memory of a computer system (column 1, lines 48-53).

Regarding claims 15-18, in further discussion of claim 13, Schneider does not teach code to perform resolution skipping operations on objects. On the other hand, Deering teaches how to perform a skip 8 instruction code which affects the manner in which the object is perceived (column 24, lines 41-67, figure 15J).

Thus, it would have been obvious to combine Schneider and Deering's inventions because while Schneider teaches an adaptive framework for 3D graphics in networked and mobile environments wherein a network graphics framework (NGF) integrates various transmission methods for downloading 3D models in a client-server environment (see Abstract), Deering teaches how to perform a skip 8 instruction code which affects the manner in which the object is perceived (column 24, lines 41-67, figure 15J). The motivation for combining these inventions would have been to provide an efficient morphing capability in the 3D system so as to eliminate any abrupt perception

gap in viewing a decompressed three-dimensional object (column 24, lines 59-61, figure 15J).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 6,239,805 to *Deering* for a method and apparatus for geometric compression of three-dimensional graphics data.

U.S. Patent 5,870,094 to *Deering* for a system and method for transferring compressed three-dimensional graphics data.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uchendu O. Anyaso whose telephone number is (703) 306-5934. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras, can be reached at (703) 305-9720.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.


Uchendu O. Anyaso

07/15/2002


STEVEN SARAS
SUPERVISORY PATENT EXAMINER
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